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May 24, 2016

Via Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

**RE: WT Docket No. 16-149
Comments of Starkey Hearing Technologies**

Dear Ms. Dortch:

Starkey Hearing Technologies writes with regard to its concerns about the potential impact of PCS Partners L.P. (PCSP) proposed Machine Type Communications (MTC) on the current and future use of hearing technologies and assistive technologies in the 902-928 MHz band.

Hearing aids and hearing aid accessories are vital to many Americans who suffer from hearing loss, allowing them to stay connected to and involved in the world^{1,2}. The use of hearing aids improves brain function³, while untreated hearing loss is linked to higher rates of depression and falls, and is correlated with increased rates of dementia.⁴

Research by Starkey Hearing Technologies has shown that the 902-928 MHz band has unique advantages⁵ for wireless communications between a pair of hearing aids and between hearing aids and accessories such as television streaming devices,

¹ This summary description of the benefits of hearing aids is taken from the second paragraph of the March 1, 2016 filing by the Hearing Industries Association in IB Docket 13-213.

² One-third of Americans over the age of 65 and two-thirds over the age of 75 currently suffer from hearing loss. See Blackwell DL, Lucas JW, Clarke TC., *Summary Health Statistics for U.S. Adults: National Health Interview Survey 2012*, National Center for Health Statistics, Vital Health Stat. 10 (260) (2014).

³ Doherty, K. A., & Desjardins, J. L., "The benefit of amplification on auditory working memory function in middle-aged and young-older hearing impaired adults," 6 *Frontiers in Psychology*. 721 (2015).
Desjardins, J. L., & Doherty, K. A., "The effect of hearing aid noise reduction on listening effort in hearing-impaired adults," 35(6) *Ear and Hearing* 600-610 (2014).

⁴ Metter J, O'Brien RJ, Resnick SM, Zonderman AB, Ferrucci L., *Hearing Loss and Incident Dementia*, 3 *Lin FR, Arch Neurol*, 68(2):12-28 (2011).

⁵ Galster, J, *A New Method for Wireless Connectivity in Hearing Aids*, *The Hearing Journal*, 63(10):36-39 (2010).

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remote microphones, and cell phone interface devices and Starkey Hearing Technologies has sold wireless hearing aids using the 902-928 MHz band in the United States since 2010.

Starkey Hearing Technologies is concerned that PCSP's proposed use of the M-LMS A block in the 902-928 MHz band will degrade the performance of hearing instruments by causing unacceptable packet loss on audio streaming channels between accessories and hearing aids.

We are even more concerned about the use of this proposed MTC in the M-LMS B and C blocks since such use would interfere with access to our two discovery channels, which are needed to establish wireless connections and without which a Starkey wireless hearing aid could become inoperable.

Starkey also notes that PCSP's offer to provide an interference mitigation service is completely inadequate when considering consumer devices such as hearing aids. Consumers will not realize that problems with their hearing aids arise from RF interference, and they certainly will not be in a position to discern the source of interference to their hearing aids and report it for remedy.

Since the proposed request by PCSP would have a detrimental effect on disabled Americans, Starkey Hearing Technologies believes that it is not in the public interest and respectfully requests that the Commission deny PCSP's request.

Should you have any questions, please feel free to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. Mitchell". The signature is fluid and cursive, with a large, stylized "W" and "M".

William J. Mitchell, PE
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